

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		10588694
	Filing Date		2005-02-09
	First Named Inventor	AGNES, George R.	
	Art Unit		
	Examiner Name		
Attorney Docket Number		S168 0226/TWB	

U.S.PATENTS							Remove
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	
	1						

If you wish to add additional U.S. Patent citation information please click the Add button.

Add

U.S.PATENT APPLICATION PUBLICATIONS							Remove
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	
	1						

If you wish to add additional U.S. Published Application citation information please click the Add button.

Add

FOREIGN PATENT DOCUMENTS								Remove
Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ²	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T ⁵
	1							<input type="checkbox"/>

If you wish to add additional Foreign Patent Document citation information please click the Add button.

Add

NON-PATENT LITERATURE DOCUMENTS				Remove
Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵	

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10588694
Filing Date	2005-02-09
First Named Inventor	AGNES, George R.
Art Unit	
Examiner Name	
Attorney Docket Number	S168 0226/TWB

1	Gao, J., et al., "Solidification of levitated Nd-Fe-B alloy droplets at significant bulk undercoolings", Journal of Alloys and Compounds, 2003, 350:344-350.	<input type="checkbox"/>
2	Gaumet, J. J. and Strouse, G., "Nanospray mass spectrometry technique for analysing nanomaterials from molecular precursors up to 1.5 nm in diameter cluster", Materials Science and Engineering, 2002, C 19:299-304.	<input type="checkbox"/>
3	Green, B. N., et al., "Observation of large, non-covalent globin subassemblies in the .apprx.3600 kDa hexagonal bilayer hemoglobins by electrospray ionization time-of-flight mass spectrometry", J. Mol. Biol., 2001, 309:553-560.	<input type="checkbox"/>
4	Grimm, R. L. and Beauchamp, J. L., "Evaporation and discharge dynamics of highly charged droplets of heptane, octane, and p-Xylene generated by electrospray ionization", Anal. Chem. 2002, 74:6291-6297.	<input type="checkbox"/>
5	Haddrell, A. E. and Agnes, G. R., "Organic cation distributions in the residues of levitated droplets with net charge: validity of the partition theory for droplets produced by an electrospray", Anal. Chem., 2004, 76:53-61.	<input type="checkbox"/>
6	Hanczyc, M. M., et al., "Experimental models of primitive cellular compartments: encapsulation, growth, and division", Science, 2003, 302:618-622.	<input type="checkbox"/>
7	Hanton, S. D., et al., "Investigations of electrospray sample deposition for polymer MALDI mass spectrometry", J. Am. Soc. Mass Spectrom., 2004, 15:168-179.	<input type="checkbox"/>
8	Hao, C., et al., "Electrospray ionization tandem mass spectrometric study of salt cluster ions: part 1- investigations of alkali metal chloride and sodium salt cluster ions", J. Mass Spectrom., 2001, 36:79-96.	<input type="checkbox"/>
9	Hao, C., et al., "Electrospray ionization tandem mass spectrometric study of salt cluster ions: part 2- salts of polyatomic acid groups and of multivalent metals", J. Mass Spectrom., 2001, 36:509-521.	<input type="checkbox"/>
10	Hermann, R., et al., "Growth kinetics in levitated and quenched Nd-Fe-B alloys", IEEE Trans. Magn., 2001, 37 (3):1100-1105.	<input type="checkbox"/>
11	Hernandez, H., et al., "Observation of the iron-sulfur cluster in Escherichia coli biotin synthase by nanoflow electrospray mass spectrometry", Anal. Chem., 2001, 73:4154-4161.	<input type="checkbox"/>

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10588694
Filing Date	2005-02-09
First Named Inventor	AGNES, George R.
Art Unit	
Examiner Name	
Attorney Docket Number	S168 0226/TWB

12	Huber, C. and Wachtershauser, G., "Activated acetic acid by carbon fixation on (Fe,Ni)S under primordial conditions", Science, 1997, 276:245-247.	<input type="checkbox"/>
13	Huber, C. and Wachtershauser, G., "Peptides by activation of amino acids with CO on (Ni,Fe)S surfaces: Implications for the origin of life", Science, 1998, 281:670-672.	<input type="checkbox"/>
14	Iavarone, A.T., et al., "Buffer loading for counteracting metal salt-induced signal suppression in electrospray ionization", Anal. Chem., 2004, 76(14):3944-3950.	<input type="checkbox"/>
15	Ishikawa, Y. and Komada, S., "Development of acoustic and electrostatic levitators for containerless protein crystallization", Fujitsu Sci. Tech. J. 1993, 29:330-338.	<input type="checkbox"/>
16	Jacob, K.T., et al., "Electromagnetic levitation study of sulfur in liquid iron, nickel, and iron-nickel alloys", Trans. Indian Inst. Met. 1986, 39:62-69.	<input type="checkbox"/>
17	Jacob, P., et al., "Phase transfer and freezing processes investigated on acoustically levitated aqueous droplets", Fresenius J. Anal. Chem., 2001, 371:726-733.	<input type="checkbox"/>
18	Jang, H. M. and Hwang, N. M., "Theory of the charged cluster formation in the low pressure synthesis of diamond: part I. charge-induced nucleation", J. Mater. Res., 1998, 13(12):3527-3535.	<input type="checkbox"/>
19	Jang, H. M. and Hwang, N. M., "Theory of the charged cluster formation in the low pressure synthesis of diamond: part II. free energy function and thermodynamic stability", J. Mater. Res., 1998, 13(12):3536-3549.	<input type="checkbox"/>
20	Joshi, Prakash, et al., "Homochiral selection in the montmorillonite-catalyzed and uncatalyzed prebiotic synthesis of RNA", Chem Commun., 2000, 24:2497-2498.	<input type="checkbox"/>
21	Julian, R.R., et al., "Nanocrystalline aggregation of serine detected by electrospray ionization mass spectrometry: origin of the stable homochiral gas-phase serine octamer", J. Phys. Chem. B., 2002, 106:1219-1228.	<input type="checkbox"/>
22	Kebarle, P. and Tang, L., "From ions in solution to ions in the gas phase. The mechanism of electrospray mass spectrometry", Anal. Chem., 1993, 65(22):972A-986A.	<input type="checkbox"/>

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10588694
Filing Date	2005-02-09
First Named Inventor	AGNES, George R.
Art Unit	
Examiner Name	
Attorney Docket Number	S168 0226/TWB

23	Keesee, R.G. and Castleman, A. W., "Thermochemical data on gas-phase ion-molecule association and clustering reactions", J. Phys. Chem. Ref. Data, 1986, 15:1011-1071.	<input type="checkbox"/>
24	Klotz, S. A., "The contribution of electrostatic forces to the process of adherence of Candida albicans yeast cells to substrates", FEMS Microbiol. Lett., 1994, 120:257-262.	<input type="checkbox"/>
25	Koch, K. J., et al., "Clustering of nucleobases with alkali metals studied by electrospray ionization tandem mass spectrometry: implications for mechanisms of multistrand DNA stabilization", J. Mass Spectrom., 2002, 37:676-686.	<input type="checkbox"/>
26	Kojima, T., et al., "Observation of triply charged metal ion clusters by electrospray and laser spray", Rapid Commun. Mass Spectrom., 1999, 13:2090-2097.	<input type="checkbox"/>
27	Kramer, B., et al., "Homogeneous nucleation rates of supercooled water measured in single levitated microdroplets", J. Chem. Phys., 1999, 111(14):6521-6527.	<input type="checkbox"/>
28	Krieger, U. K., et al., "Supercooling of single H ₂ SO ₄ /H ₂ O aerosols to 158 K: No evidence for the occurrence of the octahydrate", Geophys. Res. Lett., 2000, 27(14):2097-2100.	<input type="checkbox"/>
29	Lee, S.-W. and Beauchamp, J. L., "Fourier transform ion cyclotron resonance study of multiply charged aggregates of small singly charged peptides formed by electrospray ionization", J. Am. Soc. Mass Spectrom., 1999, 10:347-351.	<input type="checkbox"/>
30	Lee, S.-W., et al., "Chemistry in nanodroplets: studies of protonation sites of substituted anilines in water clusters using FT-ICR", J. Am. Chem. Soc., 2000, 122:9201-9205.	<input type="checkbox"/>
31	Lee, Y., et al., "Metal-assisted esterification: glutamic acid-iron(II) complexes in the gas phase", Rapid Commun. Mass Spectrom., 2001, 15:484-488.	<input type="checkbox"/>
32	Luxembourg, S. L., et al., "Effect of local matrix crystal variations in matrix-assisted ionization techniques for mass spectrometry", Anal. Chem., 2003, 75:2333-2341.	<input type="checkbox"/>
33	McDonnell, L. A., et al., "Using matrix peaks to map topography: Increased mass resolution and enhanced sensitivity in chemical imaging", Anal. Chem., 2003, 75:4373-4381.	<input type="checkbox"/>

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10588694
Filing Date	2005-02-09
First Named Inventor	AGNES, George R.
Art Unit	
Examiner Name	
Attorney Docket Number	S168 0226/TWB

34	Manil, B., et al., "Charge emission and decay dynamics of highly charged clusters and micro-droplets", Nucl. Instrum. Methods Phys. Res. B, 2003, 205:684-689.	<input type="checkbox"/>
35	March, R.E., "Ion trap mass spectrometry", Int. J. Mass Spectrom. Ion Processes, 1992, 118/119:71-135.	<input type="checkbox"/>
36	Millikan, R. A., "A new modification of the cloud method of measuring the elementary electrical charge, and the most probable value of that charge", Phys. Rev., 1909, 30:560-561.	<input type="checkbox"/>
37	Millikan, R. A., "On the elementary electrical charge and the avogadro constant", Phys. Rev., 1911, 2:109-143.	<input type="checkbox"/>
38	Morozov, V. N., et al., "Atomic force microscopy of structures produced by electrospraying polymer solutions", Int. J. Mass Spectrom., 1998, 178:143-159.	<input type="checkbox"/>
39	Musick, J., et al., "Investigations of radical polymerization and copolymerization reactions in optically levitated microdroplets by simultaneous Raman spectroscopy, Mie scattering, and radiation pressure measurements", Appl. Spectrosc., 1998, 52(5):692-701.	<input type="checkbox"/>
40	Musick, J. and Popp, J., "Investigations of chemical reactions between single levitated magnesium chloride microdroplets with SO ₂ and NO _x by means of Raman spectroscopy and elastic light scattering", Phys. Chem. Chem. Phys. 1999, 1:5497-5502.	<input type="checkbox"/>
41	Musick, J., et al., "Chemical reactions of single levitated inorganic salt particles with ammonia gas", Appl. Spectrosc., 2000, 54(8):1136-1141.	<input type="checkbox"/>
42	Myland, J.C. and Oldham, K. B., "Overcoming electroneutrality: concentrative and electrical conditions inside a charged droplet of electrolyte solution", J. Electroanal. Chem., 2002, 522:115-123.	<input type="checkbox"/>
43	Nagashio, K., et al., "Direct crystallization of Y ₃ Fe ₅ O ₁₂ garnet by containerless solidification processing", Materials Transactions, 2001, 42:233-237.	<input type="checkbox"/>
44	Nagashio, K., et al., "Containerless solidification and net shaping by splat quenching of undercooled Nd ₂ Fe ₁₄ B melts", Materials Transactions, 2003, 44:853-860.	<input type="checkbox"/>

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10588694
Filing Date	2005-02-09
First Named Inventor	AGNES, George R.
Art Unit	
Examiner Name	
Attorney Docket Number	S168 0226/TWB

45	Nettleton, E. J., et al., "Characterization of the oligomeric states of insulin in self-assembly and amyloid fibril formation by mass spectrometry", Biophys. J., 2000, 79:1053-1065.	<input type="checkbox"/>
46	Paul, W., "Electromagnetic traps for charged and neutral particles", Reviews of Modern Physics, 1990, 62(3):531-540.	<input type="checkbox"/>
47	Rabeony, H. and Mirabel, P., "Experimental study of vapor nucleation on ions", J. Phys. Chem., 1987, 91:1815-1818.	<input type="checkbox"/>
48	Ray, A. K., et al., "Dynamic behaviour of single glycerol droplets in humid air streams", Langmuir, 1989, 5:133-140.	<input type="checkbox"/>

If you wish to add additional non-patent literature document citation information please click the Add button

EXAMINER SIGNATURE

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

***EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.